U.S. Department
of Transportation

**United States
Coast Guard**

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5224/16711
7 May 1993

From: Commander, Eighth Coast Guard District
To: Distribution

Subj: INSPECTION PAPERWORK REDUCTION

1. The report of the QAT chartered by MSO New Orleans to examine the inspection paperwork process, has been forwarded to Commandant recommending implementation of the solutions identified to reduce administrative paperwork on inspectors.

2. The report suggests "unit" and "global" solutions to the paperwork burden.

3. The recommendations are forwarded for review by unit QMBs and implementation locally to reduce the burgeoning impact of paperwork on the inspection program.

T. C. GREENE
By direction

Encl: (1) MSO New Orleans ltr 16711 of 6 April 1993

Dist: MSOs Corpus Christi, Galveston, Houston, Port Arthur
MSOs New Orleans, Morgan City, Mobile w/o encl

FIRST ENDORSEMENT on MSO New Orleans ltr 16711 of 6 April 1993

From: Commander, Eighth Coast Guard District
To: Commandant (G-MVI)

Subj: INSPECTION PAPERWORK REDUCTION

1. The work of the QAT involved a comprehensive examination of the administrative support structure which is currently in place to steer the inspection process and document the commercial vessel safety inspection effort. As a consequence of this effort, many administrative savings have already been made at the unit level in this District. However, the report goes much further. Many of the recommendations are "global" in nature and the efficiencies cannot be realized without action by Commandant.

2. The report of the QAT is forwarded with my recommendation that the "global" solutions recommended for implementation by the QMB be implemented Coast Guard wide. Additionally, the "unit" solutions should be disseminated to the "M" community as suggestions to the OCMI for reducing commercial vessel safety administrative overhead at the unit.

3. We will send copies of the "unit" solutions to all the MSOs in the Eighth District recommending review by unit QMBs and adoption as appropriate.

4. The Marine Safety Division QMB will review the "global" solutions for potential use District wide. We will provide a followup report on actions taken.

T. C. GREENE
By direction

Copy: MSO New Orleans
      MSO Mobile
      MSO Morgan City
      QAT Members

Commanding Officer
U.S. Coast Guard
Marine Safety Office

1440 Canal Street
New Orleans, LA 70112-
2711
(504) 589-6196

16711
6 April 1993

From: Commanding Officer, Coast Guard Marine Safety Office
       New Orleans
To: Commandant (G-MVI)
Via: Commander, Eighth Coast Guard District (m)

Subj: INSPECTION PAPERWORK REDUCTION

1. In January 1992, this office chartered a Quality Action Team
to evaluate and make recommendations to lessen the paper
requirements on marine inspectors. The team was composed of
seven marine inspectors, representing MSO's New Orleans, Mobile,
Morgan City, and the Eighth District Marine Safety staff. This
QAT did a superb job of evaluating the current system and
identifying numerous inefficiencies and redundancies in our
inspection paperwork process.

2. As you can see by the report, the QAT divided their
recommendations into "Unit" and "Global" solutions. MSO New
Orleans, along with MSO'S Mobile and Morgan City, have already
implemented many of these unit solutions.

3. This effort was a careful, detailed study by a group of very
experienced field inspectors. Their work should significantly
reduce the paperwork burden on our marine inspection personnel
and substantially increase the available time for actual
inspection. Currently, this office experiences a two-to-one
ratio of administrative to inspection time! I strongly recommend
Headquarters make a detailed review of the work of this team and
consider implementation of these solutions Coast Guard-wide.

                                    J. W. CALHOUN

Encl: (1) MSO New Orleans QMB Comments
       (2) Inspection Paperwork Reduction QAT Report

Copy: CO, MSO Mobile
       CO, MSO Morgan City
       QAT Members

MSO NOLA QUALITY MANAGEMENT BOARD COMMENTS
ON THE INSPECTOR PAPERWORK REDUCTION QAT REPORT

UNIT SOLUTION 1: Adopted to the maximum extent possible. Each of the three MSO NOLA inspection details has been provided with the computer equipment necessary to permit their terminals to access MSIS. To provide better support, the Regional System Manager now contacts each detail as well as Marine Safety Detachment Baton Rouge every week to discuss any problems with the supervisors. Finally, we have moved one yeomen from our downtown office to one of the inspection details to enter inspection data into MSIS, thereby helping to relieve inspectors of this burden; if this proves successful, then we intend to locate one yeoman in each of the remaining details. We are now awaiting the redistribution of work stations throughout the Coast Guard so that we can better equip each detail.

UNIT SOLUTION 2: Adopted. The Regional System Manager made it known to each detail that a typing tutorial was available on the Standard Work Station; he also provided them with a manual for the tutorial. Training is ongoing regarding the Certificate of Inspection process; the Inspection Department is considering instituting natural work groups to flowchart all COI processes for the benefit of inspector trainees.

UNIT SOLUTION 3: Adopted. Inspectors now input the results of their inspections directly into the MSIS product sets rather than using the CG-840 booklets for recording purposes. The CG-840 booklets are now used solely as checklists for inspections; they are not part of the inspection record except for unique or unusual circumstances. As a training port, we may still require that our first-tour inspectors use them but they would not become part of the inspection record.

UNIT SOLUTION 4: Adopted. The levels of review have been reduced. The inspector will submit the completed inspection package to the supervisor. The supervisor will spot-check these packages; it is within the supervisor's discretion to determine the depth of review of the packages submitted. The supervisor then will forward the package to Inspection Coordination and Review (IC&R) for review and MSIS processing. After a smooth COI is prepared, it will be forwarded to the Supervisor, IC&R, for final clearance before being submitted to the Officer in Charge, Marine Inspection, for signature.

UNIT SOLUTION 5: Adopted. The Chief, Inspection Department, has published a list of those documents needed from the inspector in order to adequately review the inspection record. The MSD and detail supervisors review the inspection reports to remove unnecessary documents or ensure that pertinent documents are included in the package.

ENCLOSURE(1)

Documents needed:

> Application for inspection;
> Non-credit drydock letters;
> Marine chemist certificates;
> Permits to proceed and applications;
> Gaging reports (if provided to or requested by inspector);
> Temporary Certificates of Inspection (newly issued);
> Manufacturer's data sheets (pressure vessels);
> Safety equipment/construction certificates (U.S. vessels);
> IOPP certificates;
> Fresh water letters;
> IMO certificate of fitness (U.S. tank vessels);
> Class society deficiency reports;
> Plans and approval letters;
> Copy of front cover of newly issued TVE letter;
> Copy of newly issued TVE letter;
> Copy of newly issued and old Control Verification;
> Computer MIAR, MINS, PSVH, MICOI; and
> Equipment and structural failure reports.

Documents not needed:

> Shipyard specifications;
> Bridge record card;
> Old/cleared CG-835's and old Port Operations boarding
>   reports;
> Crew list;
> Safe manning certificates;
> Lifesaving servicing reports;
> Firefighting system servicing reports;
> Loadline certificates;
> Loadline exemption certificates;
> Excursion permits;
> Old or newly issued subchapter "O" endorsements;
> Old LOC/TVE letters; and
> Old temporary COI's

UNIT SOLUTION 6: Adopted. The Chief, Inspection Department, and the supervisors of the three inspection details and MSD Baton Rouge have agreed on minimum standards for the inspection diary, including reference to the CG-840.

UNIT SOLUTION 7: Not adopted. A Chief, Inspection Department memorandum already accomplishes this by stating that the inspector is accountable for the preparation of inspection documents. The IC&R returns the report when mistakes are made. Monthly, the CID, IC&R, MSD, and detail supervisors meet to discuss quality and recurring problems. The current system is considered satisfactory because the inspector is accountable for the quality of the package submitted and the supervisor is accountable for (1) ensuring the inspector is adequately trained

to submit a high quality package and (2) reviewing inspection packages to identify errors.

UNIT SOLUTION 8: Adopted. Only gross errors to the issuing port's COI will be corrected; such corrections will be made only after the mistake has been verified with the issuing port.

UNIT SOLUTION 9: Adopted. The Inspection Department has developed boilerplate endorsements which exist in the windows portion of MSIS, and which are now being used by the inspection details and MSD Baton Rouge.

UNIT SOLUTION 10: Not adopted. This issue was left to the Chief, Inspection Department, to address on his own. The real problem has been the delay in getting the paperwork from the inspector to the downtown office, a delay which has been largely reduced due to the implementation of solutions 3, 4, and 5, above. There have been very few times when representatives of industry have complained about not getting a COI sooner, due largely to their receiving a temporary COI immediately after the inspection (valid for one year); the permanent COI is generally mailed to the vessel's owner within 45 to 60 days of completion of the inspection. Before a transaction sheet with deadlines will be instituted, Chief, Inspection Department, will gauge the progress made from the other initiatives of this QAT.

GLOBAL SOLUTION 11: Considered moot in light of the mandate by Commandant to reallocate workstations throughout the Coast Guard. It appears that most field units will have their needs met by receiving more work stations.

GLOBAL SOLUTION 12: Not adopted by the QMB. There is no need for Commandant to act on this since a typing tutorial already exists.

GLOBAL SOLUTION 13: Recommend implementing. A significant benefit of this proposal will be the ability by Commandant to quickly revise the inspection checklists in MSIS, thereby more likely ensuring that inspections will be done more comprehensively and accurately.

GLOBAL SOLUTION 14: Recommend implementing. MSIS is not user friendly; retrieving information for inspections is difficult. It also is recommended that "windows," a mouse, and menu be provided for MSIS. It is recommended that inspectors be given portable computers to better access information during inspections.

GLOBAL SOLUTION 15: Recommend implementing.

GLOBAL SOLUTION 16: Recommend implementing.

GLOBAL SOLUTION 17: Recommend implementing.

GLOBAL SOLUTION 18: Recommend implementing. We have included a copy of LCDR E. A. Nicolaus' "Inspector's Assistant," which helps inspectors determine the statutes, regulations, policy letters, NVICs, and portions of the MSM which apply to a particular inspection-related topic. This should be distributed Coast Guard-wide via e-mail and updated regularly. If the Inspector's Assistant is accepted, the diskette containing this tool will be made available to Headquarters. It is also recommended that Commandant simplify the dissemination of policy by using only three vehicles for inspectors: federal regulations, the Marine Safety Manual, and NVICs. The NVIC would eliminate the various documents now inundating inspectors (e.g., appeal letters--which are not made known to every port, Commandant Instructions, policy letters, etc.). It is further recommended that Commandant implement a system akin to West Shephard's Citations to permit inspectors through MSIS to determine the most current Commandant policy. It is also recommended that Commandant use e-mail more extensively to publish decisions regarding policy and appeals to field units.

GLOBAL SOLUTION 19: Recommend implementing. We believe that this appears to be a good idea but appreciate that it would be a time-consuming and monumental task. It is recommended that MSIS be modified to enable downloading of Coast Guard documents when they are prepared locally (e.g., stability letter, PRIS data).

GLOBAL SOLUTION 20: Recommend implementing. There are certain items which we can readily delegate to a third party for inspection (e.g., ABS), especially for non-judgmental items (e.g., lifejackets, water cans, fire safety certifications, lifeboats). In addition, life-raft inspections that currently consume many man-hours should be turned over to third-party inspection services, relegating the Coast Guard's role to that of oversight. This is not a new concept but we fully support it.

GLOBAL SOLUTION 21: Recommend implementing. There are Coast Guard personnel with inspection expertise throughout the country. It would be easy to establish certain ports as centers of excellence on each coast. For example, Miami and Long Beach could be the centers of excellence for the inspection of cruise ships. During the initial inspection of a cruise ship, a team of highly qualified inspectors would be dispatched from the appropriate port (e.g., from Miami for East Coast inspections). These inspectors would ensure continuity of the inspection of such vessels and could train the novice inspectors in the intricacies of inspecting cruise ships. This would also prevent "forum shopping" by ship owners in a pursuit of finding the least stringent Coast Guard port in which to get a ship inspected. The inspectors from the port of excellence would work directly for the OCMI in the port where the inspection was taking place. The "traveling inspection team" now does this to some extent but it is inadequately staffed to make this program operate the way it should. An obstacle to this proposal would be the potential for significant amounts of time inspectors would be away from the

unit where they have other assigned responsibilities and away from their families. As a consequence, it would be increasingly difficult to attract qualified inspectors to such centers; this could be overcome if these ports of excellence were properly staffed.

GLOBAL SOLUTION 22: Recommend implementing. Checklists for each type of vessel could be maintained and updated in MSIS, obviating the need to publish revised CG-840 books.

GLOBAL SOLUTION 23: This solution might be difficult to implement throughout the Coast Guard: what might work at MSO New Orleans might not be feasible at MIO New York.

GLOBAL SOLUTION 24: Recommend implementing. It is also recommended that Commandant charter a Quality Action Team to determine how to get changes to the Marine Safety Manual and federal regulations out to field units more quickly.

SUBJ: INSPECTION PAPERWORK REDUCTION   28 OCT 1992

From: QAT

  To: QMB

1.   The principle task of this Quality Action Team was to
evaluate and recommend options to lessen the paperwork
requirements on marine inspectors that is associated with
conducting vessel inspections. In order to address this task
adequately, we found we had to look beyond the immediate issue of
the use of manual versus electronic records. We evaluated some
of the Commercial Vessel Safety program philosophy and
management, training of inspectors and support staff, computer
system reliability and use of outside agency technical support.

2.   The QAT, composed of 11 experienced members totalling over
225 years of Coast Guard experience including 121 years of (m)
experience (see enclosure 3 for additional qualifications),
confirmed its charter. The present inspection documentation
system doesn't meet our needs at the Unit level nor the Global
level. We (the inspection program administrators) have yet to
totally integrate the MSIS system into the inspection process
because of a failure to break with tradition in using 840 books
(and other paper documents) thereby perpetrating a duplication of
effort, i.e., we have an electronic and paper record of all
necessary inspection activity. There are excessive amounts of
paper generated/saved (more than is necessary) to satisfy the Law
and the need for future reference. The ratio of administrative
time (to generate and handle this paperwork) to inspection time
(physically inspecting vessels) is approximately two to one. For
example, a simple one hour Hull (drydock) inspection of a small
passenger vessel currently costs approximately two hours of
report writing, computer entry, and review prior to final
disposition. The study produced results that show, on a unit
level, administrative time could be reduced to a ratio of one for
one and, by implementation the global solutions, reset the
emphasis back where it belongs (where there is less time and
effort spent on the administration than on the inspection
itself). A test of the proposed Certification of Inspection
(COI) processing model at one unit produced significant results
that reduced the paperwork processing time from an average of
several months to a couple of weeks.

3.   This QAT study produced 24 recommendations to improve the
process and move it closer to our goals. The implementation of
these recommendations would involve G-M, CCGD(m), and MSO Unit
interactions. The recommendations are divided into those that
can be implemented at the local level (Unit Solutions), and those

ENCLOSURE(2)

that need District (or higher) authority to implement (Global Solutions). Many of the proposed solutions are interdependent, so doing one action at one level without concurrent action at the other (two) levels would be of limited benefit. The solutions that could be done at a unit level are within the unit's authority to change and would have the most immediate impact on reducing the inspection administrative work load. The fundamental differences between the unit level, District and HQ levels are process changes and capital investment in both man-hours and money. These recommendations should not be taken lightly even though many may be considered as just common sense, the logical progression of things, known all along, etc., but instead used to form a consistent basis in handling future inspection documentation.

4. This QAT recommends the QMB immediately implement the attached Unit Solutions to the maximum extent possible and endorse, and promote to higher authority, both the Global and the Unit Solutions for CCGD8(m) and G-M endorsement and broad implementation at inspection offices Coast Guard wide.

5. Enclosure (1) contains the Unit Solution's and the Global Solution's particulars in a problem-solution-discussion format. Enclosures (2) through (6) contain the other supporting documentation and information gathered during this QAT.

LCDR D.W. SMITH
QAT Leader

Team Leader: LCDR E. Madden (PCS'd to ANCMS)
                  LCDR D. Smith (alternate)

Members: CDR D. Riikonen (CCGD8(mvs))
                  LCDR T. Christian (MORMS)
                  LCDR R. Kulak
                  LCDR J. Evans (alternate)
                  LCDR P. Neffenger (MOBMS)
                  CWO T. Mackey
                  CWO R. Berg
                  Mr. P. Herdt
                  CWO E. Heinold (alternate)

Encl: (1) UNIT and GLOBAL SOLUTIONS, with Appendix A.
       (2) QAT Charter, 3 sheets.
       (3) QAT Member's Biographies.
       (4) Problem Statement
       (5) Preliminary Solution Categories & Tasking, 6 sheets.
       (6) Consolidated Existing COI/Paperwork Flow Chart

RECOMMENDATIONS FOR IMPROVING THE CURRENT PROCESS

GENERAL COMMENTS:

The recommendations are grouped into those that can be
accomplished by improvements at the unit level (listed as the
Unit Solutions, recommendations 1-10), and those that need
District (or higher) authority to implement (listed as the Global
Solutions, recommendations 11-24). It was beyond the scope of
this QAT to consider plan review paperwork, therefore; this QAT
did not address the handling of paperwork involved in the plan
review phase of vessel inspections. Many of the recommendations
are complementary, i.e., the maximum benefit can only be
realized if both or several are implemented. Less than total
implementation, or some recommendations by themselves, will
achieve less than maximum benefit. Many of the recommendations
need some additional planning prior to implementing and almost
all will cause vast changes to the procedures and guidance in
Marine Safety Manual. The word "paperwork" is used often to mean
that documentation (including the computer data manipulation) an
inspector creates/enters that is necessary to document inspection
activity. The word "package" is used to mean all the paper,
electronically stored data, computer printouts, etc. associated
with inspection activity, under a particular inspection case
number for a particular vessel, which is forwarded from the
inspector through the review phase for processing/filing.

UNIT SOLUTION

1....

PROBLEM: There is currently a great lack of computer system components and insufficient (knowledgeable) support personnel to maintain the current system configuration, and with this current inadequate system support, will only get worse in the future unless vast changes are implemented.

SOLUTION: Insure effective use of computer (MSIS) system managers, operators, hardware, software, terminals, phone lines, etc., across the board, i.e., have a functioning system including system support/maintenance staff in place before you rely on it (exclusively) for record keeping. Boost the priority to the level necessary to have support personnel interfacing with inspection field personnel routinely, make informed decisions, create a configuration plan, and staff the support group with sufficient people to provide same day service for repairs/maintenance.

DISCUSSION: Presently, the inspection products on the MSIS system form a data bank with limited (but pertinent) historical information regarding previous inspections and is used by many many (m) units for retrieving previous inspection data/status, recording/inputting some current inspection data, and generating Certificates of Inspection. The system components are often not available (or distributed sufficiently) for necessary access for duty work nor training, i.e., at two Inspection Details in the New Orleans area, 1 terminal is provided for 11 duty inspectors and trainees to use, and at another, only 1 terminal is provided for 14 duty inspector's and trainee's use. This is due to, among other things, the lack of a developed plan showing how the computer system(s) should be configured for MSO New Orleans. Furthermore, some portion of the existing arrangement (configuration) is often "down" due to problems at the unit, telecommunications at the District, or something happening in West Virginia (the main data bank). Only one person is assigned @ MSO New Orleans to provide computer system support and that same person is somehow also assigned as a regional computer support person for District 8 (travels to other D8 units to help with computers). In regards to budget, the field inspectors (at the Inspection Details) are told "....if something breaks..." or needs to be added, provide a written request (or a brownsheet) so money can be requested sometime in the future. Maybe the item will be funded and purchased, but on occasions, even though it was received, it was installed, but somewhere else. Planning, budgeting, assigning personnel, and computer system support would reduce the "down" time to a tolerable level and, in simple terms, create a much needed reliable computer system for the marine inspection program.

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2....   UNIT SOLUTION

PROBLEM: Inspectors/Staff currently aren't efficient typists and the current MSIS courses offered are not geared toward inspector education and training in computer (typing) skills, nevertheless; the inspectors and staff are heavily tasked with operations requiring these skills.

SOLUTION: Purchase and distribute to the unit's departments, a typing tutorial for both inspectors and support staff, to train the individuals and allow increased efficiency when handling the necessary inspection "paperwork".

DISCUSSION: Today's office environment makes typing and computer operating skills necessary for almost everyone. Inspector's paperwork includes data entry/retrieval on MSIS, report writing, OER preparation, drafting & editing letters, sending/receiving E-mail, etc., where a computer (typewriter) keyboard must be used. One such typing tutorial to consider is the "Mavis Beacon Teaches Typing", with a current cost of $44.00. Using it, a person can learn basic typing skills in approximately 24 hours of self-training. In addition, inspectors in particular need a step by step tutorial that covers the complete COI process from initial entry to COI production. The current training (at the unit and Inspection Dept Course) is ineffective and might be analogous to giving a person a car and the keys with encouragement to operate it until they are proficient. The inspector tutorial must be compatible with the current hardware and would teach keyboard skills the step by step process of generating a finished product, at their own speed. This tutorial would reduce inspector's time to type the required reports (inputting data) by approximately 50%, reduce user frustration with keyboards, and teach people how to use the machines to fullest extent (instead of such time consuming bad habits as realigning the paper in the printer to change or reset the margins). Such a tutorial would also save time at Yorktown training courses by more efficiently teaching the material at the inspector's unit before arriving for the specialized Yorktown inspector's course. This recommendation might be handled at the unit level by some units, depending on budget and familiarity of computers by a unit member, but is probably more appropriate for HQ or District action under another recommendation.

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3....   UNIT SOLUTION

PROBLEM: The inspection record processes of retrieving and entering data are much more cumbersome than they need to be. There is currently both duplicate and redundant phases to each process and the difficult, if not impossible, problem of recovering/accessing the prior written (though very seldom needed) inspection diary/record.

SOLUTION: Create a standardized and streamlined MSIS system of information retrieval and entry process for use at the unit/field level by mandating the use of the MSIS products, i.e., MIAR and MINS, as the inspection record/diary in lieu of 840 books. See page 1-3-2 for a proposed inspection diary format that could be stored and copied into each MINS using the current window feature in MSIS (F2 key) and would provide (allow to be entered) all the necessary information.

DISCUSSION: The 840's, as they are, are good but some portions need additions/updated. The CG-840 books were last revised prior to MSIS coming on line (may be just a budget problem or could be considered an unspoken message from G-M). The current MSIS products are sufficient to use for diary entry in lieu of the 840 books. The 840 books could continue to be used as a checkoff list (like a tool) during the inspection but not be expected to be retained for record purposes. The instructions for implementing this recommendation would have to allow other necessary paperwork, not duplicating data already in MSIS, to be kept for record purposes, i.e., SOLAS, IOPP, and loadline certificates. This recommendation could be implemented under the current MSIS configuration and would hopefully be complemented by the recommendations for putting an 840 book in MSIS and the recommendation of routing only paper not duplicating MSIS data. Later, with this recommendation already in place, upgraded MSIS products could become both the inspector's field guide (checkoff tool) and a temporary record (and loading form) to be used for entering updated data back into MSIS. The previous inspection diary entry (and other inspection info) could be available at all inspection offices with MSIS terminals. This would be a no $ cost change at the unit level but would be followed by a learning curve as the new process and inspectors develop.

-----INSPECTION DIARY-----

OWNER'S REPRESENTATIVE: _____
CONTACT PHONE NUMBER: _____
VESSEL DESIGN:

    //SINGLE HULL   //DOUBLE HULL-INT FRAMED CT'S
    //SINGLE HULL-INDEPENDENT CT'S   //DOUBLE HULL-EXT FRAMED CT'S
    //SINGLE HULL-GRADE D & E ONLY   //DOUBLE HULL-GRADE D & E ONLY
    //SINGLE HULL-ASPHALT   //DOUBLE HULL-ASPHALT
    //SINGLE HULL-UNMAN-DECK BARGE   //DOUBLE HULL-UNMAN-FRT BARGE
    //WOOD HULL
    //OTHER: _____

I HAVE REVIEWED MICOI, VFOC, MICP AND PSVH PRODUCTS AND FOUND EVIDENCE
OF SYSTEM OR RECURRING CLASS PROBLEMS AS INDICATED BELOW:

    //SPECIAL NOTES (MICP)_____
    //OPEN CASES (VFOC)_____
    //EXPIRED DOCUMENTS (PSVH)_____
    //REOCCURRING SYSTEMS DISCREPANCIES (PSVH)_____
    //OUTSTANDING DEFICIENCIES (MICP)_____
    //OVERDUE INSPECTION DATES (MICOI)_____

SYSTEMS FOUND DEFICIENT:

    //BALLAST   //BILGE   //BOILER   //CARGO
    //DECK MACHINERY //DOCS,LIC,PMTS //DRY CARGO //ELECTRICAL
    //FIRE FIGHTING   //FUEL   //GEN SAFETY //HABITATION
    //HULL   //IC ENGINE   //LIFESAVING //MISC
    //NAVIGATION   //PROPULSION   //STEERING   //

PARTICULARS/RESOLUTION: _____
_____
_____

IF MORE THAN ONE VISIT IS REQUIRED, STATE REASON:

    //NOT READY   //ONGOING ESSENTIAL REPAIRS //COMPLETE WORKLIST
    //IN DRYDOCK //OTHER

COMMENTS: _____
_____
_____

ADDITIONAL COMMENTS (ADD IF NECESSARY):

IN MY OPINION, VESSEL FOUND FIT FOR ROUTE AND SERVICE AS INDICATED ON
THE TEMPORARY CERTIFICATE FOR INSPECTION ISSUED
_____. _____ OUTSTANDING DEFICIENCIES. INSPECTION COMPLETED.

                          _____
                          TYPED INSPECTOR'S NAME/SIGNATURE

****
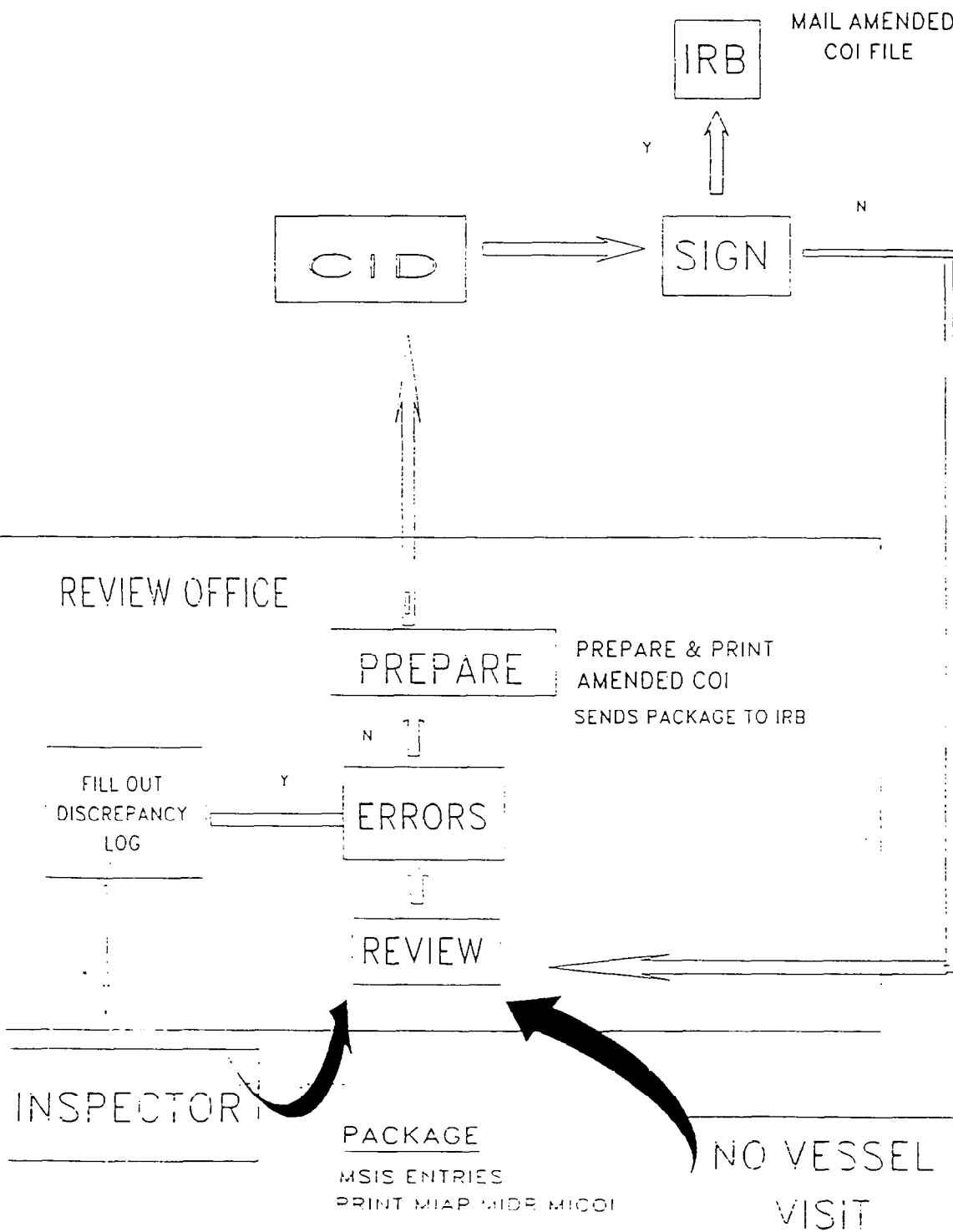
4.... __UNIT SOLUTION

PROBLEM: The redundant levels of data entry and review currently existing, before a COI can be produced, occupy more staffers, paper routing, and time, than are necessary.
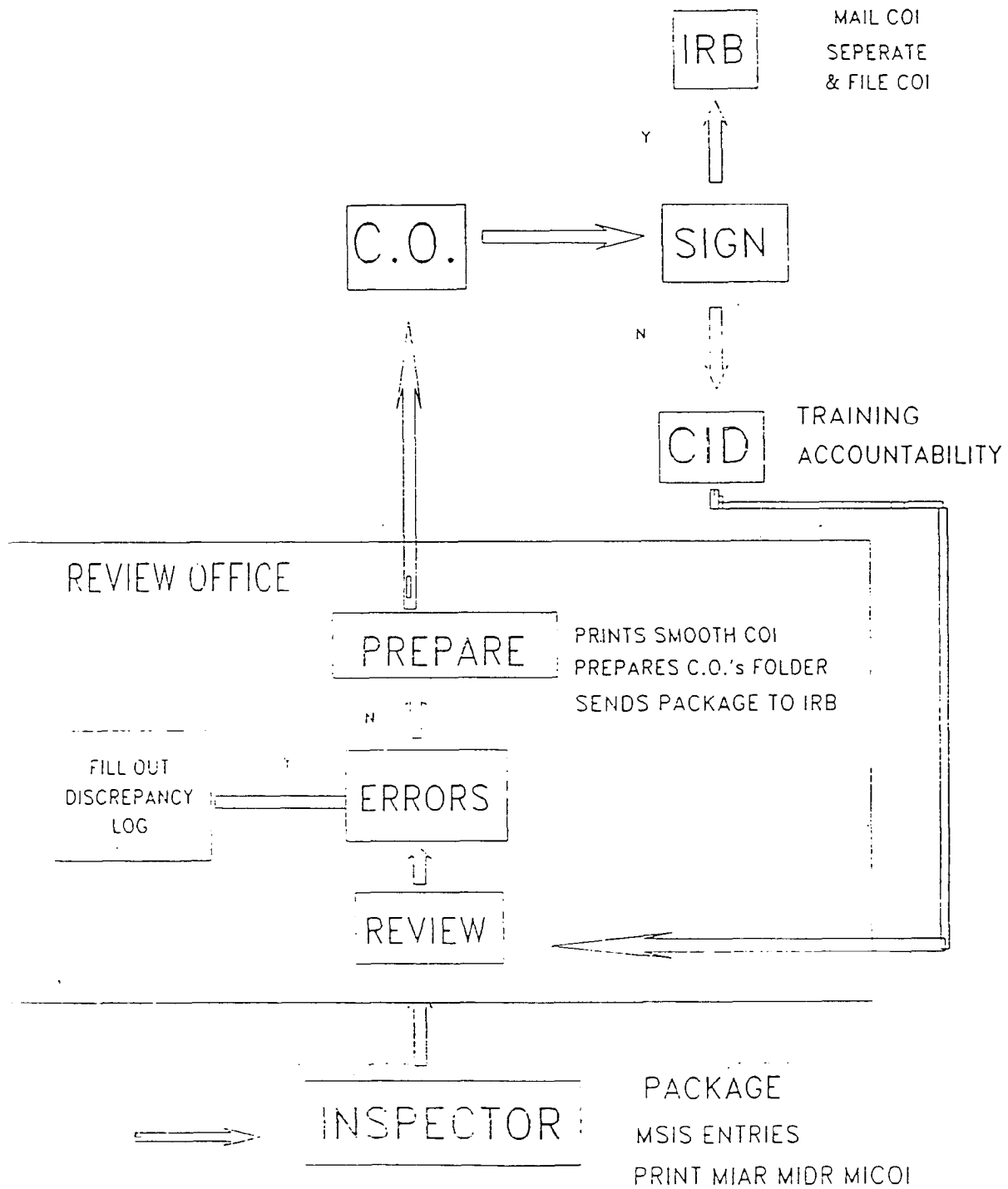
SOLUTION: Provide/define the standard model for unit paperwork management and routing that establishes what is expected of each person in the COI paperwork processing path. See pages 1-4-2 and 1-4-3 for proposed models when an existing COI is amended and another for a COI inspection.

DISCUSSION: For some types of inspections, there are as many as 5 levels of review (after the inspector completes the package). This is far more than is necessary to approach the "law of diminishing returns" when trying to reduce errors. More COI errors may occur under this recommendation, but they would be more than offset by the realized reduction in processing effort and timely service to the customer. The flow chart process could be implemented by the inspection department to clearly explain the desired review process and each person's responsibility in that process. This will keep inspector's, reviewer's, and customer's confusion/frustration at a minimum, provide an example of review responsibilities, speed up the over all COI process by removing redundant data reviewing, free up staff reviewers and paper handlers, and improve customer service by reducing the time to produce the necessary documents, e.g., COI's. Implementation would be very easy, cost little, have á high impact on customer relations. This approach would also complement another recommendation of placing the responsibility (for each "package" to be right the first time through) on each inspector, thus reducing review time/replies and the time consuming job of re-entering errant data.

NEW PROCESS FOR AMENDED COI

IRB

MAIL AMENDED
COI FILE

Y

CID → SIGN

N

REVIEW OFFICE

PREPARE

PREPARE & PRINT
AMENDED COI

SENDS PACKAGE TO IRB

N

FILL OUT
DISCREPANCY
LOG

Y

ERRORS

REVIEW

INSPECTOR

PACKAGE

MSIS ENTRIES
PRINT MIAP MIDR MICOI

NO VESSEL
VISIT

1-4-2

NEW PROCESS FOR COI

IRB

MAIL COI
SEPERATE
& FILE COI

Y

C.O. ⟹ SIGN

N

CID

TRAINING
ACCOUNTABILITY

REVIEW OFFICE

PREPARE

PRINTS SMOOTH COI
PREPARES C.O.'s FOLDER
SENDS PACKAGE TO IRB

N

FILL OUT
DISCREPANCY
LOG

Y

ERRORS

REVIEW

INSPECTOR

PACKAGE

MSIS ENTRIES

PRINT MIAR MIDR MICOI

1-4-3

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5....   UNIT SOLUTION

PROBLEM: Paper documents are being created, routed, and reviewed only to be checked and double-checked in the computer afterwards as well. The current procedure causes an unnecessary burden on the inspector, the reviewers, and paper handlers (yeoman).

SOLUTION: Mimimize paper generation and routing during COI processing by only routing necessary paper not duplicating MSIS data. Do not duplicate information already provided in the computer.

DISCUSSION: This recommendation will have a vast and immediate impact on inspectors and all others in the COI process. Paperwork demand will decrease greatly and time available for emphasis on the physical inspections of vessels (in lieu of the admininstrative follow-up) will be expanded. Review personnel will (and currently do) review cases on computer screens, but in the future, the only paper to be reviewed will be that covering information not available in MSIS. There is little (or no) cost involved. The computer work is being entered by the inspector now, therefore no extra work will be required in this area. Less time will be required by the inspector to prepare inspections case packages and obtain printouts of the info they need during the inspections. Less paper (and in some cases none) will be needed for a case during the review stage. Often the majority of the paper can be thrown away because it is not needed for vessel file records. Most, if not all, of the personnel in the review process now have access to a computer terminal. In conjunction with other recommendations for streamlining the review process and managing the computer system configuration, a re-allocation of the hardware may be necessary to carry out the review under this "minimize paper" recommendation.

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6....   UNIT SOLUTION

PROBLEM: Currently, there is no widely published guidance stating what the minimum inspection documentation (record) needs to be. The result is inconsistent inspection data entries/reports from inspectors within each inspection office and still other inconsistencies Coast Guard wide.

SOLUTION: Establish a uniform approach outlining the minimun inspection documentation requirements. Define minimum data entry (using the "good enough" criteria) for each type of inspection, e.g., MIAR with blank comment section showing reinspection (RIN) completed and MINS diary entry optional. The "package" to be routed for review could be: (1) Paperwork-review worksheet; (2) Printout of: MIAR, MINS, PSVH, MICOI; (3) Other paper (not in MSIS) such as gauging report, Permit-to-Proceed, IOPP certificate, etc.

DISCUSSION: Currently OCMI's have no guidance on the content of the narrative supplement (MINS) or comments section of the MIAR product sets in MSIS. Some supervisors insist on explanations of inspection codes (example: HUL could mean either drydock, cargo tank internal, internal structural exam, or all three) while other supervisors insist that a person could determine what the scope of the HUL inspection was from studying the NEXT DUE dates (which is time consuming). Frustration is created when data is repeated up to four (4) times during the course of preparing a "package", and is looked at as useless work and a waste of time, especially if it is already in the MSIS system. Inspectors are sometimes repeating data in the comments section already entered in other parts of the MIAR but fail to enter pertinent comments that aren't stored elsewhere (example: Permit to Proceed data). This recommendation complements the recommendation of using the MINS exclusively for diaries all inspections (in lieu of 840 books) to further reduce confusion and provide a better understanding of the inspection scope. Overall paperwork preparation time would be reduced and therefore better service to the customer would result. Implementation would be cheap and the benefits enormous in man-hour research savings.

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7.....   UNIT SOLUTION

PROBLEM: Certificates, such as COI's, are submitted from the field
with previous (or current) errors causing the reviewers to make
corrections, or re-route the packages back to the inspector with
additional notes (paper), thus, delaying the completion and issuance
of certificates to the customer.

SOLUTION: Make the inspector accountable for the entry and
preparation of paperwork and production of an acceptable COI, or other
document, instead of relying on the review process to either correct
or add missing information, by listing the duties and expectations of
inspectors in a widely published document and encouraging strict
enforcement.

DISCUSSION: Inspectors have a tendency to accept COI's as gospel and
copy mistakes from one COI to the next. They make corrections to new
dates but "overlook" the wording on endorsements, references, or
amounts, such as required buoyant apparatus or the number of cargo
tanks. This holds true for other issued certificates as well such as:
Cargo Ship Safety Equipment Certificates and International Oil
Pollution Prevention Certificates. When a proxy COI is pulled up on
the computer by an inspector, prior to an inspection, it too should be
inspected as part of the inspector's normal routine when preparing for
the inspection. There are occasional errors on COI's (either
something wrong or omitted) that should be corrected by the inspector
prior to (re)issuance. If not corrected at the current inspection,
then it will likely cause extra effort on the next one. If in doubt,
it should be brought to the attention of the supervisor, discussed,
and appropriate action to correct any data errors, should be completed
by the inspector. The computer COI should be complete and correct
when the inspector submits his "package" instead of depending on the
review process to either correct or add missing information. It would
help to avoid this "habit" (often developed through ignorance of the
regs, improper training, laziness, etc.) if the inspector were held
accountable by listing the duties and expectations of inspectors in a
widely published document and strict enforcement encouraged. This is
a no $ cost recommendation, but takes some time and effort to develop
job descriptions and responsibilties within the unit. Implementing
this recommendation is a re-enforcement of what is already demanded of
supervisors and inspectors and included in the (directing others and
responsibility) sections of their OER's.

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8....   UNIT SOLUTION

PROBLEM: Some inspection offices add, change, or delete particular endorsements of the issuing port's COI, to be consistent with their own, even when it has nothing to do with their current inspection. This action causes additional (and unnecessary) inspector paperwork to change and then again when it is restored by the original port at the next inspection.

SOLUTION: When taking amendment action to an existing COI, only review/correct/edit the COI amendment for the specific new action. Do not change the issuing port's original (unaffected) work unless there is concurrence between the OCMI's.

DISCUSSION: Some ports put endorsements on COI's that are important and unique to vessels operating in that particular zone. There is a tendency to change another office's COI in order to "clean it up", because "we don't use that wording" or "we don't put that on a COI". This takes inspector's time and computer entries, plus paper record, that is often unnecessary and usually undesireable by the original issuing port. If a current inspection action is completed and a COI amendment appropriate for the current action, then amend the COI for the current action only. This does not mean COI's shouldn't be reviewed completely for correctness. They should be reviewed completely but any other endorsements/data that exist from the issuing port should remain (as is) unless there is deemed some "harm" in leaving them and there is concurrence with the issuing port for changing them. Obvious "harmful" errors on any COI should be corrected by any inspection office. This recommendation would cost nothing to implement and could eliminate the inspector time and paperwork needed to "fix" the COI and then again when it is restored by the original port at the next inspection.

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9.... UNIT SOLUTION

PROBLEM: Each port has a tendency to use its own wording or notions as to what endorsements should be on a COI due to lack of guidance (standard endorsements) from COMDT and District, e.g., vapor recovery system operation authorization confusing inspectors when processing the paperwork.

SOLUTION: Provide for standardized COI endorsements using canned route-phrases-statements inventoried in Document Designer format. These would be reviewed once, stored in the computer, and then brought into subsequent COI's using the window feature in MSIS (F2 key). See Appendix A for endorsements used at MSO New Orleans.

DISCUSSION: Defining and using standard endorsements would reduce time and effort the inspectors currently have to invest to determine what is proper for a particular vessel. Making these standard endorsements available in the computer would reduce the paper involved in the inspectors writing them out by hand. District or COMDT should act as the repository of the standard phrases. It is understood that some endorsements which are local in nature, such as a ferry route, would be the exception to the rule. All others would be uniform from MSO to MSO and district to district. It would help both industry and our inspectors. A recent (and current) example of this paperwork problem is the wording used/needed for vapor recovery system operation authorization. Some endorsements were provided by COMDT but were insufficient to handle most of the inspection circumstances encountered, e.g., the COMDT's guidance would have forced a COI mismatch that appeared to allow collection of the vapors from cargoes on a barge that weren't even authorized to be carried on board. With insufficient direction from headquarters, several ports wrote their own endorsements (similar, but the wording varies), and in at least one port, one authorization letter was written covering all of one operator's vessels in lieu of amending each vessel's COI. This is a low cost recommendation and would most likely also reduce the tendency of some ports to want to change other ports COI endorsements.

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10....   UNIT SOLUTION

PROBLEM: A more expedient and timely system is needed to get the
inspection report renewed, approved, and certificate(s) delivered to
the customer. The length of time between the end of the physical
inspection and mailing the COI is excessive (often taking months).

SOLUTION: Establish a paperwork review worksheet that sets a standard
routing for review/processing that either returns the paperwork to the
inspectors for correction, or forwards the paperwork package for
signature and final disposition. See page 1-10-2 for a proposed
model.

DISCUSSION: It is taking too long to get the inspection reports
through the system. Its not uncommon for a proper package to take a
couple of months from the time the inspection is completed until the
COI is finally sent out of the office. Our current process is design
ed for routing cases that have no problems. The review process gets
disrupted whenever a paperwork/computer error is encountered and
founders somewhat from lack of a feedback and re-accounting document.
The current MSIS data configuration does not help the situation either
because it does not allow returning a case electonically, e.g., from
the main office to an MSD, for changes/corrections. If a mistake is
found during the final review phase (at the main office), it is
usually corrected without returning the books/data to the inspector
becuase it would take too much time to document the error, generate
routing instructions, be corrected, and then go through the review
system again. The inspector (and all others in the review process up
to that point) are deprived of part of their training by not being
required to correct their own error(s) and may repeat the same error
on other cases. With more than a couple of review levels, a
routing/status slip is needed (more paperwork) to show the next action
to be taken. A standard routing and review worksheet could be
published defining a reasonable process including corrections if
needed. In conjunction with other recommendations to shorten the
review phase, better control and accounting via a standard worksheet
would allow the COI (which is the bottom line of the job) to get out
quicker and improve the inspector's efficiency. This recommendation
could be carried out with very little cost but realize substantial
benefit by reducing the paperwork routing to a defined standard path
that works regardless of errors/corrections.

Vessel Name _____
INSP DATE _____
CASE NUMBER(S) _____
INSPECTOR(S) _____

ROUTING	INIT	DATE
INSPECTOR(S) ROUTINE INSP 5 WORK DAYS•		
NEW CONST 30 WORK DAYS•		
REVIEW 5 WORK DAYS•		RETURN Y / N
INSPECTOR(S) CORRECTIONS 3 WORK DAYS•		
REVIEW 3 WORK DAYS•		
RB		

	COI PREP	
REISSUE	AMEND	NO ACTION
CO SIGNATURE		Y / N
CID/REVIEW CORRECTIONS 2 WORK DAYS•		
SIGNATURE		
INSPECTION DEPT MAIL & PROCESS		

COMMENTS
•JUSTIFICATION FOR DELAYS

VESSEL TYPE
OSV-I   OSV-I<100GT   OSV-T
TNKS   TNKB   FRTS   FPTB
MODU   INDV   PASS   SPV
LFTBT-I   LFTBT-I<100GT   LFTBT-T

ROUTE
OCNS   OCENS-GOM   CSTWS
LBS   RVRS   INLND
INSPECTION TYPE
COI   RIN   HUL   ADM   COC   LOC   OTH•

1-10-2

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11....     GLOBAL SOLUTION
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PROBLEM: There is a perceived future problem of a lack of computer system components, and insufficient (knowledgeable) support personnel through out the Coast Guard, to maintain the future system configuration if the increased dependence on (and expansion of) computer systems continue at its current rapid rate and the support/maintenance continues at its current rate.   If plans are not implemented in time to adequately handle the higher dependency, those processes involving computers will be severely handicapped (or even stalled) until sufficient support can be rallied.

SOLUTION: Boost the priority to the level necessary to insure future effective use of computer (MSIS) system managers, operators, hardware, software, terminals, phone lines, system support/maintenance staff, etc., through planning and implementation, to have a functioning reliable system for years to come, i.e., avoid crisis management later by plannning and implementing now.

DISCUSSION: Presently, the inspection products on the MSIS system form a data bank with limited (but pertinent) historical information regarding previous inspections and vessel's status. The system is used by numerous (m) units for retrieving previous inspection details, recording/inputting current inspection data, and amending or generating new COI's. The system components are often not available (or distributed sufficiently) for necessary access for duty work nor training, i.e., at two Inspection Details in the New Orleans area, 1 terminal is provided for 11 duty inspectors and trainees to use, and at another only 1 terminal is provided for 14 duty inspector's and trainee's use. This is due to, among other things, the lack of a developed plan to balance the computer system(s) vs. workload at MSO New Orleans and its Inspection Details. Furthermore, some portion of the existing arrangement (configuration) is often "down" due to problems at the unit, telecommunications at the District, or something happening in West Virginia (the main data bank). Only one person is assigned @ MSO New Orleans to provide computer system support and that same person is somehow also assigned as a regional computer support person for District 8 (travels to other D8 units to help with computers). A method exists where problems can be reported from the field but no follow-up or feedback loop currently exists for particular problems.

Based on the current level of computer system support, indications are it will only get worse in the future unless vast changes are implemented. HQ and/or District support personnel are needed to interface with inspection field personnel routinely, make informed decisions, create a configuration plan, adjust budgets, contract for necessary support, and staff the support group with sufficient people to provide same day service for repairs/maintenance. Planning, budgeting, assigning personnel, and computer system support would reduce the "down" time to a tolerable level and, in simple terms, create a much needed reliable computer system for the marine inspection program.

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12....   GLOBAL SOLUTION

PROBLEM: Inspectors/Staff currently aren't efficient typists but are
heavily tasked with operations requiring these skills. The units may
be able to purchase (subject to budget constraints) typing tutorials
that, most likely, will differ from unit to unit, district to
district, etc.

SOLUTION: At the HQ level, purchase (existing or contract to have
written) and distribute to the various units, a typing tutorial for
both inspectors and support staff, to train the individuals at the
unit and allow increased efficiency when handling the necessary
inspection "paperwork".

DISCUSSION: Today's office environment makes necessary typing and
computer operating skills of almost everyone. Inspector's paperwork
includes data entry/retrieval on MSIS, report writing, OER
preparation, draft & edit letters, send/receive E-mail, etc. where a
computer (typewriter) keyboard must be used. One such typing
tutorial to consider is the "Mavis Beacon Teaches Typing", with a
current cost of $44.00. Using it, a person can learn basic typing
skills in approximately 24 hours of self-training. In addition,
inspectors in particular need a step by step tutorial that covers the
complete COI process from initial entry to COI production. The
current training at the Inspection Dept Course is ineffective and
might be analogous to giving a person a car and the keys with
encouragement to operate it until they are proficient. The inspector
tutorial must be compatible with the current hardware and would teach
keyboard skills the step by step process of generating a finished
product, at their own speed. This tutorial would reduce inspector's
time to type the required reports (inputting data) by approximately
50%, reduce user frustration with keyboards, and teach people how to
use the machines to fullest extent (instead of such time consuming bad
habits as realigning the paper in the printer to change or reset the
margins). Such a tutorial would also save time at Yorktown training
courses by more efficiently teaching the material at the inspector's
unit before arriving for the specialized Yorktown inspector's course.

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13....   GLOBAL SOLUTION

PROBLEM: The CG-840 books form an unnecessary duplicate of the primary information entered in MSIS subsequent to an inspection.

SOLUTION: From the HQ level, mandate exclusive use of MSIS to document the inspection, thus eliminating the requirement for CG-840 books to be filled in for vessel COI's and re-inspections.

DISCUSSION: The Marine Safety Information System (MSIS) has evolved into the accepted and preferred method of entering and retrieving vessel data, including prior inspection results, deficiencies noted during inspections, conditions of operation, and vessel history. The CG-840 books are currently used by marine inspectors as "memory joggers" for items/systems to check during an inspection, and for recording their written vessel inspection diary. Due to the rapid changes and increased responsibilities of marine inspection during the past several years, the information within the current CG-840 books is quickly becoming outdated and obsolete. In addition, the diary of a CG-840 book is not as important today as it was prior to the implementation of MSIS since a written inspection diary can now be placed within the Marine Inspection Narrative Supplement (MINS).

The QAT believes that the exclusive use of MSIS will be more efficient, will save the Coast Guard the cost of updating, printing, and distributing CG-840 books, will save transferring inspection records (files) zone to zone, and will reduce paperwork needed to document inspections substantially.

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14....   GLOBAL SOLUTION

PROBLEM: Computer entry of data by typing in each data item is time consuming, tedious, and thus, subject to errors.

SOLUTION: Explore the possibility of using existing technology, such as optical scanners with editable standardized Document/Designer forms, for loading data into MSIS.

DISCUSSION: Current computer technology is available to allow improvements within the MSIS system. For example, inspectors are often required to update COI endorsements by manually typing the endorsement change in the Vessel File Operation Detail (VFOD) section of the vessels COI. This manual change allows spelling errors to be made and incorrect wording to be used. By utilizing a Document Designer program where a simple code would be entered (e.g. F7) to scan the standard "canned" endorsements, the possibilities of error on COI's would be reduced significantly. In addition, optical scanners would greatly reduce computer use time during initial loading and updating of vessel data. The vessel data loading book could be developed to allow darkening of various data blocks on the form and be optically read into MSIS by the input devices such as the optical scanner.

The QAT believes that the development of a MSIS optical data loading scanner and Document Designer feature would save the government in overall computer use time, decrease the data entry (manpower) time, and improve the quality of COI's. This recommendation, in conjunction with others to update/change the computer system, could make great strides in progressing toward the very desireable situation of "putting the emphasis back on the safety of vessels in lieu of dwelling on the administration of the inspection after the fact."

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15....   GLOBAL SOLUTION

PROBLEM: Entering the coding (that supports the wording) of CG-835's
in the computer is a time consuming process of searching out the
proper, but often hard to find, series of code letters.

SOLUTION: Put the CG-835 codes that are required for the MIDR product
in a menu format to speed up/lessen the inspector's workload.

DISCUSSION: Currently, deficiencies that are noted during a vessel
inspection are written on a CG-835 form and issued to the vessel
operator. All of these same CG-835 items must be entered into MSIS
using the MIDR product. The current MSIS configuration will not
accept the input unless it has certain codes in acceptable
combinations. These combinations of entry codes are only obtained by
researching the MSIS Operations Manual printed listings. These
product codes should be made immediately available to the loading
operator through a loading menu contained within the MIDR. The QAT
strongly believes that MSIS and it's various products (e.g. MIDR)
should be "self contained" and "self supportive". The system should
not need additional publications or outside operation manuals for it's
proper and effective use of entry codes during normal operation. This
solution is not likely to reduce the time inspectors spend determining
the proper code sequences but would reduce the paperwork involved by
allowing the decision on coding to be made in conjunction with data
entry in lieu of looking the codes up in advance, writing them on
paper, and then duplicating them in the computer.

Another alternative might be to investigate a method of batch mode
where a computer (that's not necessarily connected to MSIS) have the
codes available and the inspector run compatible software to create a
data file of inspection activity. The computer could then be
connected to MSIS, or transferred to a connected terminal, for
submission of the inspection activity data set in batch mode. This is
a common method in many time-share computer applications, and in this
situation, would allow other (non-dedicated MSIS) computer hardware to
be used for MSIS purposes. An overall increase in efficiency could be
realized.

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16....   GLOBAL SOLUTION

PROBLEM: The great majority of items contained in the vessel
inspection (paper) files are duplication of data already in MSIS.
They take up space at the units and cause assignments of people to
perform maintenance on seldom needed files.

SOLUTION: Mandate the electronic record keeping of inspections in
MSIS as the official record required by 46 USC 3310.

DISCUSSION: It is seldom, if ever, that previous inspection vessel
files are accessed for information that is pertinent and/or not
currently in MSIS. As with any change, it will be necessary to
provide written instructions and guidance to those affected. In this
case all MSO/MIO's, field offices, and marine inspectors will need to
be notified and guided by revisions to the Marine Safety Manual (Vol.
II). A consultation with an attorney attached to MSO New Orleans has
indicated there is no prohibition of designating the computer record
as the official record for purposes of meeting the administrative
record keeping law. The establishment of a total electronic record
keeping system will be a significant change for all concerned. A
detailed " Electronic Record Keeping" section in the Marine Safety
Manual with specific instructions for its's mandated use will ensure
uniformaty and proper implementation. There is little cost associated
with this recommendation and in conjunction with other recommendations
with allow significant reduction in handling (routing, filing, and
culling) inspection paperwork.

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17....   GLOBAL SOLUTION

PROBLEM: The field inspector is required to take note of official policy which applies to the inspection job at hand. Much of the policy applicable is maintained in the Marine Safety Manual. However, due to a rapidly changing industry, much of the policy is outdated, in development or in draft stages and unavailable to the inspector.

SOLUTION: Load and maintain the Marine Safety Manual in MSIS (or other readily available source using existing computer systems). This will facilitate rapid updates, accuracy, currency and availability to all field personnel.

DISCUSSION: The Marine Safety Manuals are the repository for most of the policy and guidance that affects inspection decisions and actions. As such, the MSM is highly valuable reference source to the inspector. However, the availability of the MSM to every inspector is less than 100%. Ideally, each individual in the "m" program should have immediate access to current policy affecting the program. However, the MSM is not available to every inspector due to the limited distribution of that Commandant Instruction. Additionally, in many instances where the MSM is available, the manual is not maintained up-to-date and current with all existing policy.

With the entry of the MSM into the MSIS data base, the problems with availability are solved for all program personnel. In addition, the logistical problems presently encountered with amending and maintaining the manual will be significantly reduced due the immediacy with which the data base could be up-dated. Also, the placement of the MSM into the MSIS data base will provide cost savings to the CG by eliminating the burdensome costs of printing the manuals for distribution to the distribution list. This is a win-win recommendation and should be implemented immediately.

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18.... GLOBAL SOLUTION

PROBLEM: The field inspector is required to understand and consider a great deal of information (laws, regulations, agreements and policy) that applies to the inspection of commercial vessels. The policy applicable can be found in a number of different repositories: the Marine Safety Manuals, NVICs, G-MVI Policy Letters, District and local policy files. Some of the policy is duplicated, some is contradictory, some is incomprehensible, some is difficult to locate and some is out of date due to the rapid changes that are occurring in the marine industry. The explosion of information is overwhelming the inspector, consuming valuable time that could otherwise be devoted to the inspection of the vessel and jeopardizing the credibility and authority of the inspector.

SOLUTION: Consolidate/eliminate multiple sources of policy affecting inspection activities. This could be accomplished by creating a clearing house (control point) for program policy. Additionally, all inspection laws, regulations and policy should be sheperdized (similar to West Law) and maintained in MSIS, or supplemental to MSIS. This would facilitate the control of policy and would make the search for all applicable policy by the field inspector a more accurate and exacting process.

DISCUSSION: The chore of the field inspector has become increasingly more complicated over the years due to the changes that have occurred in the marine industry domestically and internationally. In the 70s the inspector was responsible for the Laws Governing Marine Inspection, Title 33 and 46 of the Code of Federal Regulations, a singular volume of the Marine Safety Manual (CG-203), NVICs and the Equipment List. The inspector of the 90's is expected to be computer literate so he can access the CG's MSIS data base to prepare for and document each vessel inspection, to be knowledgeable of federal statutes in Title 33, 43 & 46 United States Code, knowledgeable of federal regulations in Title 29, 33, 46, & 49 Code of Federal Regulations, knowledgeable of Int'l Conventions (IMO Codes), knowledgeable of policy in the Marine Safety Manuals (10 Volumes), knowledgeable of NVICs, knowledgeable of G-MVI Policy Letters, District Policy Letters and Unit Policy. A sheparding system of the inspection laws, regulations and policy would greatly help the inspector and other program personnel to quickly assess the Coast Guard's inspection posture on any issue or in any situation. A "Westlaw" type system is a key word driven, cross referenced, centrally managed data base. This recommendation, if adopted, has the potential to save precious inspector time and eliminate costly and/or embarrassing mistakes in the application of inspection policy. The cost of implementing this recommendation could be recovered in a very short time (probably within a year, if not months) and substantial income could be gained for years to come by selling subscriptions to the marine industry, or anyone else, and making it available on a time-share basis.

PROBLEM: The present design of the MSIS data base does not serve the inspector to the best of its ability. In many instances an inspector must research a vessel's historical inspection file to gain a complete picture of the vessel. This search can only be accomplished manually through an examination of paper files, which can involve several different inspection offices. This method of examining a vessel's historical records is cumbersome and time consuming.

SOLUTION: Update or change MSIS products to provide for optional archival search capabilities of historical data, e.g., prior issued Certificates of Inspection, stability letters, PRIS, licenses, etc. Also, immediate gain to the field would occur if VFCE data was entered by G-MSC and COFR data was entered by the NPFC.

DISCUSSION: The ability to conduct a complete search of a vessel's history via the MSIS data base would eliminate the delays that currently occur in preparing a vessel inspection file which may require a paper chase throughout the "M" community. In addition, the ability to access a complete vessel file via the MSIS data base will provide every MSO/MIO with the same complete record of a vessel. This would eliminate the potential for misapplication of inspection requirements and the loss of valuable vessel information necessary to properly formulate an inspection plan. Currently, the most valuable MSIS products for researching a vessel's recent inspection history are PSVH (notice its not even in the Inspection Product Set) and MICOI. The validity of Certificates of Financial Responsibility, required for vessels carrying oil and/or hazard substances, can only be verified by calling the Nat'l Pollution Fund Center when the VFLD product of MSIS could (and used to be) used to show the very same info. The cost of implementing this recommendation could best be estimated by the computer support group and only then could a judgment of costs vs. benefit be made.

PROBLEM: The CG has been criticized for examining the same equipment and systems examined by other organizations, e.g. ABS. A CG inspection policy which provides for redundant inspections does not elevate the level of safety on a vessel. In fact, inspection redundancy may be considered by many to be inimical to safety due the effects that time constraints, schedule conflicts and fatigue can have upon vessel personnel.

SOLUTION: Expand the acceptance of inspection reports by the American Bureau of Shipping or similar United States classification societies or agents of the Bureau or societies to determine compliance with inspection standards, as provided by 46 U.S.C. 3316.

DISCUSSION: The Coast Guard has become a regulatory giant in a rapidly expanding world of international commerce and competing global economies. As a result, the CG has heaped many responsibilities on the commercial vessel safety program without a corresponding commitment to training or personnel resources. Congress and the Coast Guard have published laws and regulations to make the marine industry a safer, cleaner and kinder industry in response to the outcry of different factions.
       But, there is more to the commercial vessel safety program than a shelf of books crammed full of regulatory do's and don'ts. A few years ago the Coast Guard's CVS program had a philosophy. It was based upon a commitment to safety and to the viability of the U. S. Merchant Marine. In recent years, however, the "M" community has resorted to a philosophy of publish or perish in an effort to cure the ills of the commercial maritime industry or to demonstrate that perceived problems have been addressed. The vehicle for success in academia has come of age in Washington, D.C.
       It is time to revisit the philosophy of the CVS program and do the things that are in keeping with that philosophy and that further those ideals. The acceptance of third party inspection reports from U.S. Classification Societies will do much to elevate the burden presently being felt by the CVS inspector, will ensure the level of safety is being maintained on U.S. vessels and will ease the regulatory/inspection burden on the U.S. Merchant Marine. Acceptance of inspection reports from U.S. Classification Societies is provided for by 46 U.S.C. 3316 and deemed equivalent to CG inspections.

Another consideration could be the acceptance of other (than class societies) third party inspections. Professional engineers, approved service .facility representatives, certifying companies, naval architects, automation specialists, weld inspectors, etc., could be evaluated for acceptance of vessel material conditions/inspections on behalf of USCG.

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21....   GLOBAL SOLUTION

PROBLEM: The commercial vessel industry continues to comment on the "lack of continuity" noted within the Coast Guard during vessel inspections at various ports. Specifically, their concern concentrates on the time involved, the number of inspectors used, the application of written guidance/regulations, the thoroughness of the inspection or examination, and the correctness of issued documents. Industry is eagerly looking for continuity within the Coast Guard vessel inspection program and for marine inspectors who are skillful, knowledgeable, and consistent with the rules and regulations of commercial shipping.

SOLUTION: Investigate the possibility of creating a pool of qualified inspectors that are available (by season and/or geographic areas) at the field level to analyze current inspection processes at various MSO's, assist in streamlining each MSO's process, conduct inspections, and train new inspectors on particular phases of vessel inspections. With the complexities and potential hazards of today's commercial shipping, "Centers of Excellence" should be established to specialize in Initial inspections and exams of domestic and foreign tanks ships, cruise ships, and MODU's. Centrally located "Centers should be responsible for all initial exams/inspections (regardless of location) within designated AOR's. Subsequent Annual and Quarterly exam (or inspection) responsibilities should be retained by the cognizant OCMI with program guidance from the "Centers".

A "Center of Excellence" should be adequately staffed with seasoned marine inspectors who are "fully qualified" and have the specialized training needed by the unit (Center). In addition, "Centers" should be located in or near areas of high vessel activity (e.g. Houston for tank ships - Gulf, Miami for cruise ships - East coast, and New Orleans for MODU's - Gulf, etc.).   ·

The recommended tour length at a "Center of Excellence" would be four to five years. In order to provide "Centers of Excellence" with qualified inspectors at times of rotation, training ports such as New York, New Orleans, and Seattle would send trainees (funded by HDQTRS) during Initial vessel examinations/inspections. Inspectors who demonstrate excellent inspection ability would be candidates for assignment to a "Center of Excellence".

A program such as this would provide industry with the continuity that they want, and expertise that the Coast Guard needs. The concept appears to be very appealing to industry.

DISCUSSION: Commercial vessel safety laws and regulations have continued to grow astoundingly complex. Continued changes and revisions to U.S. and international safety standards (e.g. SOLAS) have demanded a surge of technical knowledge sometimes far beyond the capabilities of an average marine inspector. Commercial vessel activities have shifted slowly from areas once recognized as excellent training ports, to areas less suited for large volume inspector training.

The shifting of commercial vessel activities has placed smaller MSO's in need of "specialized" and "qualified" marine inspectors in order to carry out their mandated CVS functions. In many cases, the training of newly assigned inspectors becomes the direct responsibility of units that are not fully capable or equipped for such training. As a result, new inspectors are not uniformly trained or exposed to the technical and complex issues found within U.S. law, international regulations, and Coast Guard policies for large commercial vessels. Preparation by a marine inspector for an initial examination-inspection on a large tank ship, cruise ship, or MODU takes considerable time, study, and technical knowledge of the complex systems and subsystems on board. The knowledge required to review detailed vessel drawings, conduct intensive examinations, and to interpret and apply complex rules and regulations comes from continual study, qualified training, and on board exposure.

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22....   GLOBAL SOLUTION

PROBLEM: The inspection record processes of retrieving and entering
data are much more cumbersome than they need to be. There is
currently both duplicate and redundant phases to each process and the
difficult, if not impossible, problem of recovering/accessing the
prior inspection diary/record.

SOLUTION: Create a standardized and streamlined MSIS system of
information retrieval and entry process for use at the unit/field
level by merging the necessary information currently recorded in the
CG-840 books into an MSIS product set that acts as both the
inspector's field guide and a loading format for the required
inspection report. Mandate the use of the MSIS products, i.e., MIAR
and MINS, as the inspection record/diary in lieu of 840 books. In
simple terms this means: "Put an updated 840 book, for each type of
vessel, in MSIS."

DISCUSSION: The 840's, as they are, are good but some portions need
additions/updated. The CG-840 books were last revised prior to MSIS
coming on line (may be just a budget problem or could be considered an
unspoken message from G-M). There needs to be a merging of required
inspection items, the 840 books, and the MSIS products. A new or
modified MIPIP could serve this function if it contained only those
products applicable to the vessel type selected. The current MIPIP is
unwieldy and most often consists of many blank pages not tailored to
the particular vessel type. Merging the necessary information into an
MSIS product set, so that the resulting product could act as both the
inspector's field guide and a temporary record (loading format) to be
used for entering updated data back into MSIS, could save considerable
time and money, and also improve retrieval and entry efficiency. CG-
840 updating, printing, & distribution costs would be eliminated
(future updates could be done by the MSIS system support/manager) and
the previous diary entry (and other inspection info) could be
available at all inspection offices with MSIS terminals. One logical
progression might be to create a list by taking only the necessary
inspection items from the 840 book, add updates to it per the current
regulations, and then merge that list into MSIS. This way could take
advantage of existing MSIS products/data and make obvious the
necessary cross mapping within the data base. The 840 books could
continue to be used as a checkoff list (like a tool) during the
inspection (but not expected to be retained for record purposes) until
the remaining items (not currently contained in MSIS) are added to the
inspection product sets. The instructions for implementing this
recommendation would have to allow other necessary paperwork, not
duplicating data already in MSIS, to be kept for record purposes,
i.e., SOLAS, IOPP, and loadline certificates.

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23.....   GLOBAL SOLUTION

PROBLEM: The redundant levels of data entry and review currently
existing, before a COI can be produced, occupy more staffers, paper
routing, and time, than are necessary and if standard models are
created at each field unit without HQ or District coordination, the
undesireable situation of multiple "standards" will develop.

SOLUTION: At the District and/or HQ level, provide standard models
for field unit's paperwork management and routing that establishes
what is expected of each person in the COI paperwork processing path.
This is expected to be coordinated with the efforts of the various
units in developing what is best for them under Unit Solution Item 10.

DISCUSSION: For some types of inspections at some units, there are as
many as 5 levels of review (after the inspector completes the
package). This is far more than is necessary to approach the "law of
diminishing returns" when trying to reduce errors. More COI errors
may occur under this recommendation, but they would be more than
offset by the realized reduction in processing effort and timely
service to the customer. A flow chart could be developed and
distributed to OCMI's for incorporation into their standing orders to
clearly explain the desired review process and each person's
responsibility in that process. This will keep inspector's,
reviewer's, and customer's confusion/frustration at a minimum, provide
an example of review responsibilities, speed up the over all COI
process by removing redundant data reviewing, free up staff reviewers
and paper handlers, and improve customer service by reducing the time
to produce the necessary documents, e.g., COI's. Implementation would
be very easy, cost little, have a high impact on customer relations.
This approach would also complement another recommendation of placing
the responsibility (for each "package" to be right the first time
through) on each inspector, thus reducing review time/replies and the
time consuming job of re-entering errant data.

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24....   GLOBAL SOLUTION

PROBLEM: The Marine Safety Manual will be very outdated if the other recommendations attached are adopted.

SOLUTION: Revise the Marine Safety Manual guidance to reflect, allow, or direct, the adopted recommendations from this package.

DISCUSSION: Many of the recommendations cause a signifcant change to the current way inspection business is conducted. The Marine Safety Manual (MSM) is often thought of as the "reference" guide to handling inspection work. Most of the current desired practices are contained in the MSM and will need many changes to document the above adopted recommendations. This is expected to be somewhat costly depending on the extent of acceptance of the recommendation to computerize the MSM and distribute it electronically, or to follow the current practice of mass printing and mailing.